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10/510,049	10/01/2004	Junji Masumoto	0074/044001	6313

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1901 PENNSYLVANIA AVENUE N W
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WASHINGTON, DC 20006

EXAMINER

TYLER, NATHAN K

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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/510,049	Applicant(s) MASUMOTO ET AL.	
	Examiner Nathan K. Tyler	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11, 14-18, 24 and 25 is/are rejected.
- 7) ☒ Claim(s) 6-10, 12 and 19-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01102004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. Figures 1, 2, and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Shiraiwa (US 7057751 B1).

Regarding **claim 1**, Shiraiwa discloses an image reproduction device comprising a read unit (Fig. 16, numeral 12 "data reading unit") which reads each file information stored in an image file storage medium (Fig. 16, numeral 11 "information recording medium 11" at column 19, line 24); a control unit (Fig. 16, numeral 15 "system control unit") which performs a control operation in such a manner that the read unit reads from the image file storage medium a thumbnail image of the image file which contains the description of automatic reproduction in the automatic reproduction file (see Fig. 19, steps 310 through 314, thumbnail image data is read for images marked for reproduction in "autoprint.mrk." "In the sixth embodiment, a thumbnail image is displayed on the data display unit" at column 19, line 50); an image development unit which develops the image file read by the read unit ("an image reproduction processing unit 14 for receiving image data read by the data reading unit... and converting the image data into reproduction output data for performing reproduction output and outputting the reproduction output data" at column 19, line 37); a storage element into which the image data developed by the image development unit are written (Fig.16 shows system display unit 180. In order to display image data, it must be stored in a storage element); and an image display unit which reads and displays a list of the thumbnail images written in the storage element (Fig. 16, numeral

180 "System Display Unit." See Fig. 19, step 314 "read image data for display and display read image data on display unit." "The image files to be subjected to image reproduction are sequentially added to the data display unit 180 to be displayed thereon, and a summary of images are displayed. FIGS. 24(a)-24(c) are examples of such display" at column 21, line 43).

Regarding **claim 14**, Shiraiwa discloses an image reproduction method comprising the steps of reading said automatic reproduction file information stored in said image file storage medium (Fig. 19, numeral 310 "read autoprint.mrk"); reading a thumbnail image information file of the image file which contains the description of automatic reproduction in said automatic reproduction file from said image file storage medium (Fig. 19, numeral 314 "read image data for display..."); and displaying a list of said thumbnail images that have been read (Fig. 16, numeral 180 "System Display Unit." See Fig. 19, step 314 "read image data for display and display read image data on display unit." "The image files to be subjected to image reproduction are sequentially added to the data display unit 180 to be displayed thereon, and a summary of images are displayed. FIGS. 24(a)-24(c) are examples of such display" at column 21, line 43).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraiwa.

Regarding **claim 2**, Shiraiwa discloses displaying thumbnail image data for all images set for automatic reproduction (see Fig. 19). Shiraiwa also discloses that the thumbnail images of all the image files stored in the image file storage medium are displayed regardless of the automatic reproduction information of the automatic reproduction file (see Fig. 20, at step 501, the first image file on the image file storage medium is read, regardless of the automatic reproduction file. Then at step 512, the next image file is read. In this manner all image files on the image file storage medium are displayed, regardless of the automatic reproduction file), and the thumbnail image is read from the image file storage medium (Fig. 20, step 501 “read first image data file in information”).

Shiraiwa does not disclose an input unit which selectively determines whether only the thumbnail image of the image file which contains the description of automatic reproduction in the automatic reproduction file read by the read unit is displayed or the thumbnail images of all the image files stored in The image file storage medium are displayed regardless of the automatic reproduction information of the automatic reproduction file.

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the image reproducing apparatus disclosed by Shiraiwa with an input unit to choose between the embodiment of Fig. 19 where only the thumbnails of the automatic reproduction images are displayed, and the embodiment of Fig. 20, where thumbnails for all image files are displayed. In this way the user of the apparatus could selectively choose to

confirm every image recorded on the image file storage medium for reproduction (see Fig. 20, step 302 “image to be reproduced to be confirmed?”).

Regarding **claim 15**, Shiraiwa discloses after reading said automatic reproduction file information stored in said image file storage medium, waiting an input for selectively determining whether only the thumbnail image of said image file which contains the description of automatic reproduction in said automatic reproduction file is displayed or the thumbnail images of all the image files stored in said image file storage medium are displayed regardless of said automatic reproduction file information; and reading the thumbnail image selected from said image file storage medium (see grounds for rejection for claim 2).

6. Claims 3, 4, 5, 11, 16, 17, 18, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shiraiwa and Ohkubo et al. (US 20020003963 A1).

Regarding **claim 3**, Shiraiwa teaches displaying only the thumbnail data for images marked for automatic reproduction. Shiraiwa also discloses differentiating between thumbnails of images to be reproduced, and not to be reproduced, on the display (see Fig. 24(c), images to reproduced marked with “P”). Shiraiwa does not disclose that the storage element holds dummy image data corresponding to a thumbnail image, and the control unit performs the control operation in such a manner that a dummy image is read from the storage element in place of the thumbnail image of the image file which contains the description of non-automatic reproduction in the automatic reproduction file read by the read unit.

Ohkubo discloses an image reproducing apparatus in which image data to be displayed can be replaced with dummy image data, which renders the image difficult to recognize (see Fig. 5, “privacy protection process” is executed before display of the image. See Fig. 6A, the image may be replaced with a version with lowered brightness, contrast, or size).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to provide the image reproducing apparatus disclosed by Shiraiwa with the privacy protection means disclosed by Ohkubo, so that during confirmation of images to be reproduced, the thumbnail images of the images not marked for reproduction would be hard to see for any individuals in viewing range of the display (“The privacy protection mode is a process for having the images displayed on the screen of the image printing apparatus provided with a predetermined process so as to be seen hardly from a third person around there during the setting necessary for the printing operation” at paragraph [0110]).

Regarding **claim 4**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses an input unit which selectively determines whether the thumbnail image is displayed as a dummy image or as a thumbnail image (Ohkubo Fig. 6A “Private Display” yes/no), wherein the control unit performs the control operation in such a manner that a thumbnail image is read from the image file storage medium in a case where the thumbnail image is selected by the input unit (see Fig. 20, numeral 501 “read first image data...”), and a dummy image is read from the storage element in a case where the dummy image is selected by the input unit (see Ohkubo Fig. 5. When protection mode is selected, “privacy protection process” is executed prior to the display.

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The output from this process must be stored, and then this stored data is read by the display at step S203).

Regarding **claim 5**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses that the control unit reads thumbnail images of all the image files from the image file storage medium (see grounds for rejection for claim 2), and the image development unit develops the thumbnail image of the image file which contains the description of automatic reproduction in the automatic reproduction file read by the read unit as a normal image and (see grounds for rejection for claim 3), also, develops a thumbnail image of the image file which contains the description of non-automatic reproduction in the automatic reproduction file as an image difficult to recognize (see grounds for rejection for claim 3).

Regarding **claim 11**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses an input unit which selectively determines whether display of a thumbnail image displayed as said image difficult to recognize is canceled or not, wherein said control unit performs the control operation in such a manner that in a case where display of an image developed by said input unit as an image difficult to recognize is canceled, a thumbnail image corresponding to the image is read from said image file (see Ohkubo Fig. 6a, "Private Display," when no is chosen, privacy mode is canceled).

Regarding **claim 16**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses displaying the image file with the description of non-automatic reproduction in said automatic reproduction file as a dummy image in place of the thumbnail image (see grounds for rejection for claim 3).

Regarding **claim 17**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses waiting an input for selectively determining whether said thumbnail image is displayed as a dummy image or a thumbnail image; and displaying the selected thumbnail image (see grounds for rejection for claim 4).

Regarding **claim 18**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses displaying a thumbnail image of an image file which contains the description of automatic reproduction in said automatic reproduction file as a thumbnail image as it is; and developing a thumbnail image of an image file which contains the description of non-automatic reproduction in said automatic reproduction file as an image difficult to recognize and displaying the thumbnail image (see grounds for rejection for claim 5).

Regarding **claim 24**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses waiting an input for selectively determining whether the display of said thumbnail image displayed as an image difficult to recognize is canceled or not; and when canceling the display of said image as an image difficult to recognize, replacing the thumbnail image corresponding to the image with a thumbnail image which is originally stored in said image file (see grounds for rejection for claim 11).

Regarding **claim 25**, the combination of Shiraiwa and Ohkubo applied to claim 3 discloses waiting an input for selectively determining whether said dummy display of the thumbnail image displayed as said dummy image is canceled or not; and when the display as a dummy image is canceled, replacing the thumbnail image corresponding to the image with the thumbnail image which should originally be stored in said image file (see grounds for rejection for claim 11).

Allowable Subject Matter

7. Claims 6-10, 12, and 19-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding **claims 6 and 19**, the prior art does not teach generating the write address for a storage element discontinuously in accordance with a predetermined rule by a write address generating unit when developing the thumbnail image of the image file which contains the description of non-automatic reproduction in the information of an automatic reproduction file.

Regarding **claims 7 and 20**, the prior art does not teach generating the read address for a storage element discontinuously in accordance with a predetermined rule by a read address generating unit when developing the thumbnail image of the image file which contains the description of non-automatic reproduction in the information of the automatic reproduction file.

Regarding **claims 8 and 21**, the prior art does not teach generating the write address for a storage element discontinuously in accordance with a predetermined rule by a write address generating unit and generating the read address for the storage element discontinuously in accordance with a predetermined rule by said read address generating unit when developing the

thumbnail image of the image file which contains the description of non-automatic reproduction in the information of said automatic reproduction file.

Regarding **claims 9 and 22, and claims 10 and 23**, which depend from claims 9 and 22 respectively, the prior art does not teach holding first and second different dummy image data as dummy images, and that the first dummy image is read from a storage element in place of the thumbnail image for image files which are designated for non-automatic reproduction in the automatic reproduction file, and the second dummy image is read from a storage element in place of the thumbnail image for image files not stored in an automatic reproduction file.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan K. Tyler whose telephone number is 571-270-1584. The examiner can normally be reached on M-F 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Nathan K Tyler
Examiner
Art Unit 2625



KING Y. POON
PRIMARY EXAMINER

Supervising Patent